

CLAIMS

What is claimed is:

1. A method of fabricating a micro pipe, comprising the steps of:

providing a substrate;

providing a base layer on said substrate;

providing a trench in said base layer;

providing a photoresist layer on said base layer and covering said trench; and

imparting a generally arcuate configuration to said photoresist layer by subjecting said photoresist layer to ionizing radiation.

2. The method of claim 1 further comprising the step of heating said photoresist layer during said subjecting said photoresist layer to ionizing radiation.

3. The method of claim 1 wherein said base layer comprises a material selected from the group consisting of a metal and an oxide.

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4. The method of claim 3 further comprising the step of heating said photoresist layer during said subjecting said photoresist layer to ionizing radiation.

5. The method of claim 1 wherein said ionizing radiation comprises UV radiation.

6. The method of claim 5 further comprising the step of heating said photoresist layer during said subjecting said photoresist layer to ionizing radiation.

7. The method of claim 5 wherein said base layer comprises a material selected from the group consisting of a metal and an oxide.

8. The method of claim 7 further comprising the step of heating said photoresist layer during said subjecting said photoresist layer to ionizing radiation.

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9. A method of fabricating a micro pipe, comprising the steps of:

providing a substrate;

providing a base layer on said substrate;

providing a trench in said base layer;

providing a photoresist layer having a thickness of from about 1 μm to about 10 μm on said base layer and covering said trench; and

imparting a generally arcuate configuration to said photoresist layer by subjecting said photoresist layer to ionizing radiation.

10. The method of claim 9 further comprising the step of heating said photoresist layer to a temperature of from about 150 degrees C to about 300 degrees C during said subjecting said photoresist layer to ionizing radiation.

11. The method of claim 9 wherein said base layer comprises a material selected from the group consisting of aluminum, copper, titanium nitride and an oxide.

12. The method of claim 11 further comprising the step of heating said photoresist layer to a temperature of from about 150 degrees C to about 300 degrees C during said subjecting said photoresist layer to ionizing radiation.

13. The method of claim 9 wherein said ionizing radiation comprises UV radiation having a wavelength of from about 100 nm to about 350 nm.

14. The method of claim 13 further comprising the step of heating said photoresist layer to a temperature of from about 150 degrees C to about 300 degrees C during said subjecting said photoresist layer to ionizing radiation.

15. The method of claim 13 wherein said base layer comprises a material selected from the group consisting of aluminum, copper, titanium nitride and an oxide.

16. The method of claim 15 further comprising the step of heating said photoresist layer to a temperature of from about 150 degrees C to about 300 degrees C during said subjecting said photoresist layer to ionizing radiation.

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17. A method of fabricating a micro pipe, comprising the steps of:

providing a substrate;

providing a base layer on said substrate;

providing a trench in said base layer;

providing a positive polymeric photoresist layer on said base layer and covering said trench; and

imparting a generally arcuate configuration to said photoresist layer by subjecting said photoresist layer to ionizing radiation.

18. The method of claim 17 further comprising the step of heating said photoresist layer to a temperature of from about 150 degrees C to about 300 degrees C during said subjecting said photoresist layer to ionizing radiation.

19. The method of claim 17 wherein said base layer comprises a material selected from the group consisting of aluminum, copper, titanium nitride and an oxide.

20. The method of claim 17 wherein said ionizing radiation comprises UV radiation having a wavelength of from about 100 nm to about 350 nm.